

CLAIMS

1. A method of storing a received digital signal which has been encrypted by an encryption key (CW) and transmitted in encrypted form, comprising the steps of:

decrypting the signal using a decryption key (CW) corresponding to the encryption key;

processing the decrypted signal;

re-encrypting the processed signal using the encryption key; and

storing the re-encrypted signal.

2. A method according to claim 1, wherein the step of processing the decrypted signal includes manipulating it to improve storage and/or playback operation.

3. A method according to claim 1 or 2, wherein the decryption key (CW) is the same as the encryption key (CW).

4. A method according to any one of the preceding claims, wherein the encryption key is one of a plurality of keys forming a key stream.

5. A method according to claim 4, further comprising delaying the key stream after decrypting the signal and before re-encrypting the processed signal.

6. A method according to claim 5, including delaying the key stream in dependence on the processing being carried out on the decrypted signal.

7. A method according to claim 5 or 6, wherein the digital signal comprises a stream of transport packets, the method including synchronising the key stream with the transport packet stream.

8. A method according to any one of the preceding claims, wherein the step of processing the decrypted signal comprises performing the operations of Packet Identification Number (PID) remapping, remultiplexing or transcoding.

9. A digital signal storage device for storing a digital signal which has been encrypted using an encryption key (CW) and transmitted in encrypted form, the device comprising:

decryption means (13) for decrypting the signal using a decryption key corresponding to the encryption key;

means (17) for processing the decrypted signal;

encryption means (18) for re-encrypting the processed signal using the encryption key; and

means (19) for storing the re-encrypted signal.

10. A storage device according to claim 9, wherein the processing means (17) comprises means for manipulating the decrypted signal to improve storage and/or playback operation.

11. A storage device according to claim 10, wherein the processing means comprises means for performing the operations of Packet Identification Number (PID) remapping, remultiplexing and/or transcoding.

12. A storage device according to any one of claims 9 to 11, wherein the decryption key (CW) is the same as the encryption key (CW).

13. A storage device according to any one of claims 9 to 12, wherein the encryption key is one of a plurality of keys forming a key stream.

14. A storage device according to claim 13, further including delay means (20) for delaying the key stream prior to re-encrypting the decrypted signal.